GLENTOR

Purge valve blocks of VB 16 series are used in hydraulic closed loop circuits with motors in which a purge valve is not installed (e.g. circuits with radial piston motors). They serve for circuit flushing, reducing temperature in the system and removing air from hydraulic fluid.
Purge valve blocks are applicable in hydrostatic propel systems of mobile machines.

Design and function

The purge block consists of housing, spool, low pressure relief valve and centering springs. Purge block is connected with its two main ports to both high pressure branches (A, B) of closed loop circuit. Pressure relief valve output is connected with tank. If pressure in both branches A, B is equal, the spool is in central position and connection with pressure relief valve is closed. When pressure in one branch (e.g. A) increases, the spool is pushed by this pressure to one functional position and opens the connection of the branch with lower pressure (B) with relief valve input. Excess fluid from B flows thus to tank. When higher pressure is in B, the spool is pushed to the opposite position and connects A with the relief valve input. In this case excess fluid from A flows to the tank

GLENTOR

Produced versions

VB 16-03 and VB 16-08 are determined for installation in pipeline. Special versions for direct mounting on the main ports of Linde variable pumps of HPV-02 series are following:

VB 16-01	HPV 55-02
VB 16-02, VB 16-04	HPV 75-02 and HPV 105-02
VB 16-05	HPV 135-02
VB 16-06	HPV 210-02
VB 16-07, VB 16-09	HPV 165/02

Technical data

Nominal size		16 mm
Pressure	- nominal	350 bar
	- maximum	420 bar
Pressure relief valve setting		10 bar (basic) or according to customer's wish
Fluid		mineral hydraulic oils
Viscosity	- recommended range	$(20 \text{ to } 65) \cdot 10^{-6} \text{ m}^2\text{s}^{-1}$
	- minimum	$8 \cdot 10^{-6} \text{ m}^2\text{s}^{-1}$
	- maximum	$250 \cdot 10^{-6} \text{ m}^2\text{s}^{-1}$